

Do you have modern seals on your Crankshaft and Camshaft? Have you attempted to remove and replace the timing cover with a modern seal installed?

In the old days when these seals were tightly compacted felt instead of modern timkin-type neoprene seals, removal of the timing cover was a simple procedure.

But, with modern seals, how does a Model T mechanic remove & re-install the timing cover for maintenance to the components under the cover such as seal replacement, cam repair, cam bearing end-play adjustment, timing gear replacement, etc.?

From my personal experience the only way the timing cover could be removed would be to unbolt it, pry it, force it, and sacrifice the two seals, then, the cover could be removed. But the problem is still present on the re-installation of the cover without damaging the two new seals. So, the solution is to remove the engine from the car, in turn dropping the pan so that the new seals can be replaced after the maintenance procedure.

To say the least, this simple task is a good day's work, not counting the maintenance procedure that lies ahead.

Last winter, Larry Williams (my mentor), and I were having a phone conversation about the long hours he had been spending in his shop trying to pin down a slapping noise that he had been hearing, but no luck at finding. I think he told me he had R & R'd the engine several times, and each attempt failed because the slapping was still present. Finally, he had come to the conclusion that the noise was camshaft end-play, because there was nothing else.

Where is all of the writing going? I expressed my sympathy because he would have to R & R the motor once more.

His answer was "NO". Then, he explained how the front lip of his "Crankshaft Seal retainer" had been removed for easier removal of the timing cover.

After much thought about his statement and with an engine removal for a magneto repair ahead, I decided to give his method a try.

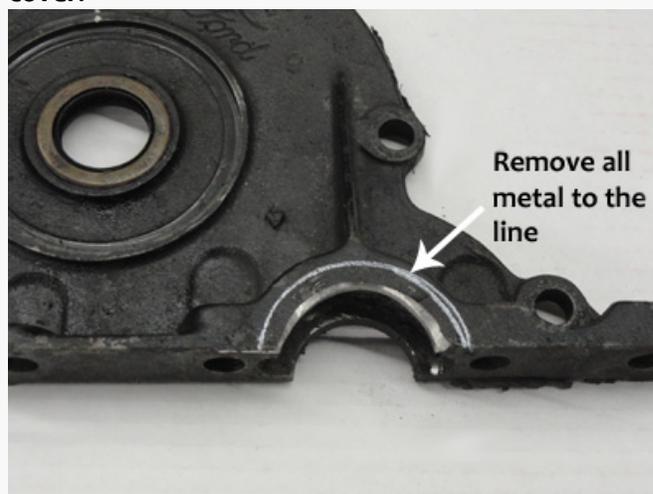
First, the engine must be removed, and the pan separated from the block. In my case, the timing cover was removed for removal of the fiber timing gear and replacement with a new gear. This made my job easier.

Next, with the pan facing up, a cleanup is in order to remove any RTV, sealer, oil, and other foreign matter present.

Next, using a Dremel type tool or die grinder grind the front lip of the seal retainer almost flush with the bottom of the cavity so that the seal will clear the lip when the timing cover is slid off and separated from the block.



Next, outline the diameter of the seal on the timing cover.

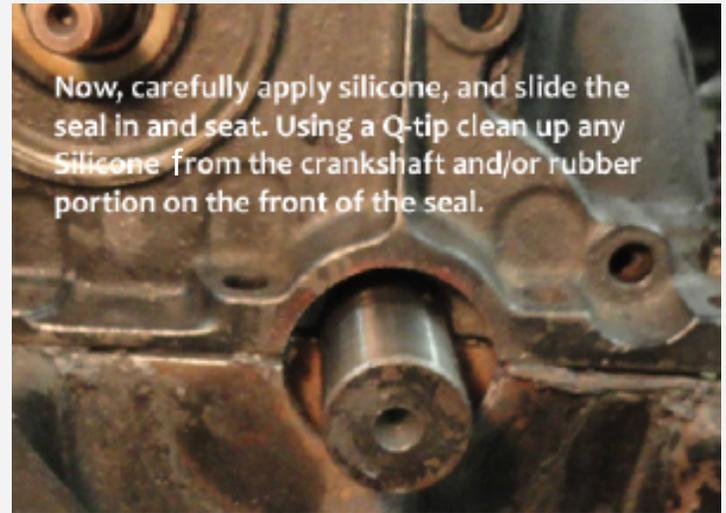


Tech Tip

Next, grind the excess metal from the timing cover and install the cover. Then, apply silicone to the back of the seal and slide onto the crankshaft and seat seal. Next, apply masking tape to the shaft and pack silicone in the cavity using a Q-tip, carefully keeping clear of the rubber seal and crankshaft. Remove the masking tape. Allow silicone at least a day.

Tech tip by Lynn Cook. Written by Bill Robinson

Page 2



Now, carefully apply silicone, and slide the seal in and seat. Using a Q-tip clean up any Silicone from the crankshaft and/or rubber portion on the front of the seal.